STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION

GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

The Missouri Department of Natural Resources hereby issues a permit to:

Construction Permit ID:	MOGSE0501
Title of Project:	City of Lee's Summit
Owner:	City of Lee's Summit
Address:	220 SE Green Street Lee's Summit, MO 64063

The project will also include general site work appropriate to the scope and purpose of the project and will include all the necessary appurtenances to make a complete and usable collection system. The construction of this project will be in the vicinity of the county below and discharge to Receiving Permit ID below:

County: Jackson Receiving Permit ID: MO0101087

for the construction of (described construction project):

Lees Summit Colbern Road Reconstruction-Construction of approximately 826 lf of 8-inch SDR-35 PVC gravity sewer lines with approximately 7 manholes and approximately 4,787 lf of 12-inch DR-11 HDPE force mains with air release valves to serve existing infrastructure. No additional flow is proposed with this relocation.

Project is in the vicinity of Colbern Rd, between NW Blue Pkwy and NE Douglas St, in Lees Summit, Jackson County, and discharges to an existing system to be treated at the LBVSD Atherton WWTP, MO-0101087. Craig M. Kohler, P.E., Senior Staff Engineer with Lees Summit Public Works signed the application for the continuing authority on January 17, 2023.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department) As the Department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.
This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

January 27, 2023
Issue Date

Chris Wieberg, Director
Water Protection Program

January 02, 2025
Expiration Date

APPLICABILITY

1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Non-earthen flow equalization storage basins at lift stations and inline storage, which flows back into the lift station or collection system, are also included.

2. A site specific sewer extension construction permit may be required by the Department due to compliance and enforcement actions.

3. Projects located within an Approved Sewer Program as noted in the operating permit of the receiving wastewater treatment facility are not required to obtain a construction permit from the Department of Natural Resources (Department).

4. This permit does not apply to:
   A. Earthen storage basins;
   B. Exempt projects unless requested by the applicant or required by enforcement.

PREREQUISITES:

1. The General Sewer Extension Construction Permit application, appropriate fee, and documentation in accordance with 10 CSR 20-6.010(5)(G).

2. The plans and specifications each signed and sealed by a professional engineer registered in the State of Missouri in accordance with 10 CSR 20-8 and 10 CSR 20-6.010.

3. The Design Certification form or Engineering Report or Summary of Design signed and sealed by a professional engineer registered in the State of Missouri certifying the design of the system was prepared in accordance with 10 CSR 20-6 and 10 CSR 20-8.

4. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the wastewater for treatment and indicating the permitted treatment facility has the available capacity.

5. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the responsibility for operation and maintenance of these facilities.

PERMIT CONDITIONS:

1. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.

2. The construction must be in accordance with the final plans and specifications approved by the Department.

3. State and Federal Law does not permit bypassing of raw wastewater; therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the Department's regional office per 10 CSR 20-7.015(9)(E)2., or through the Online Bypass/SSO Reporting system found at https://dnr.mo.gov/eservices.htm under Water Protection.

PERMIT CONDITIONS: (continued)

4. Protection of drinking water supplies must meet the requirements of 10 CSR 23-3.010 .
   A. There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto, which would permit the passage of any wastewater or polluted water into the potable supply.
   B. Sewers shall be laid at least fifty feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures.

5. Manholes shall be located with the top access at or above grade level.

6. In addition to the requirements for a construction permit, see 10 CSR 20-6.200 for land disturbance requirements to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the Department's ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm.

   See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.

7. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the Department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Water Protection Program at 573-751-1300 for more information.

   See www.dnr.mo.gov/env/wpp/401/ for more information.

8. If this project eliminates a wastewater treatment facility under the jurisdiction of the Department, then a full closure plan shall be submitted with a Facility Closure Request Form, Form – MO 780-2512 to the Department's appropriate regional office for review and approval. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, of the Missouri State Operating Permit. Closure shall not commence until the submitted closure plan is approved by the Department.

9. If this project is part of a project to resolve an enforcement action or is receiving funding from the Department, submit a statement of work complete following the completion of construction

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

APPLICATION FOR CONSTRUCTION PERMIT – SEWER EXTENSION

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED	CHECK NO.
DATE RECEIVED	

NOTE ► Please Read the accompanying instructions before completing this form

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

1.1 Is this a Federal/State funded project? ☑ YES ☐ N/A Funding Agency: MoDOT Project #: STP-3301(527

1.2 Has the Department of Natural Resources approved the proposed project's engineering report*?
☐ YES Date of Approval: ☐ NO ☑ N/A

1.3 Is a copy of the appropriate plans* and specifications* included with this application? ☑ YES ☐ NO
If the project is using standard specifications, name of community: Lee's Summit, MO

1.4 Is a summary of design* included with this application? ☐ YES ☑ NO

1.5 Is the appropriate fee or JetPay confirmation included with this application? ☑ YES ☐ NO
See Section 7.0

* Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT
Colbern Road Reconstruction

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
NW Colbern Road	Lee's Summit	MO	64081	Jackson

2.2 Legal Description: ¼, ¼, S1/2 ¼, Sec. 25 , T 48N , R 32W

2.3 Project Components (check all that apply):
☑ Gravity sewers ☐ Pumping stations ☑ Force mains ☐ Alternative sewer system ☐ Other (Describe below.)

2.4 PROJECT DESCRIPTION
The City of Lee's Summit proposes to widen Colbern Road between NW Blue Parkway and NE Douglas Street from a two-lane local street to a four-lane divided major arterial roadway. The roadway construction will require the relocation of a 12" force main and 8" gravity sewer line with no additional flow. The work is as described below:

- 4,787 LF of 12" DR-11 HDPE force main will be installed to replace an existing 12" ductile iron force main. HDPE is being used due to the corrosive nature of the soils in this area. The relocated force main will discharge into a new manhole that will be constructed on the existing 36" gravity sewer line that runs along Little Cedar Creek.
- 846 LF of 8" SDR-26 PVC gravity sewer line will replace the existing gravity sewer line along the south side of Colbern Road. The new gravity line will discharge into a new manhole on the existing 12" sewer line on the west side of Little Cedar Creek.

2.5 DESIGN INFORMATION

A. Population or number of lots to be served by this extension: N/A - Construction will replace existing lines

B. Estimated flow to be contributed by this extension: Design Average Flow: 0 gpd Design Peak Hourly Flow: 0 gph

C. Industrial Wastes: Type: N/A Flow: 0 gpd

D. Receiving Sewer: Size: 36 inches Capacity: N/A gpm

E. Does this project (check all that apply):

☐ Connect to an existing treatment plant ☐ Resolve enforcement issue ☐ Eliminate or consolidate an existing treatment plant

F. Estimated number of onsite systems being removed: 0

G: Estimated costs associated with piping: $ 744,000 Estimated costs associated with lift station(s): $ N/A

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
City of Lee's Summit, Missouri	816-969-1800	Craig.Kohler@CityofLS.net

ADDRESS	CITY	STATE	ZIP CODE
220 SE Green	Lee's Summit	MO	64063

CHARTER NUMBER (SECRETARY OF STATE) or REGISTERED AGENT

MO 780-1632 (10-22)

4.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity, or person(s) that will be legally responsible for ensuring compliance with the permit requirements and provide continuous stable oversight of the permitted facility or activity. The Continuing authority should be a relatively permanent entity responsible for the ongoing operation, maintenance and modernization, when needed, of the permitted facility or activity. A continuing authority is not, however, an entity or individual that is contractually hired by the permittee to sample or operate and maintain the system for a defined time period, such as a certified operator or analytical laboratory. To access the regulatory requirement regarding continuing authority, 10 CSR 20-6.010(2), please visit Clean Water Commission Chapter 6. A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of State's (SoS's) webpage: Missouri Secretary of State, unless the continuing authority is an individual(s), government entity, or otherwise not required to register with the SoS.

NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
City of Lee's Summit, Missouri	816-969-1800	Craig.Kohler@CityofLS.net

ADDRESS	CITY	STATE	ZIP CODE
220 SE Green	Lee's Summit	MO	64063

CHARTER NUMBER (SECRETARY OF STATE)

4.1 Has appropriate continuing authority acceptance been provided as follows:
A letter from the continuing authority accepting responsibility for continued maintenance of the sewer (if the continuing authority is different than the original owner of the construction), or a properly executed "Continuing Authority and Receiving Wastewater Treatment Facility Acceptance" Form 780-2584. ☐ YES ☐ NO ☑ N/A

5.0 ENGINEER

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
Lawrence Gregory, P.E. / Garver	479-287-4677	LFGregory@GarverUSA.com

ADDRESS	CITY	STATE	ZIP CODE
4300 SE J.B. Hunt Drive, Suite 240	Rogers	AR	72758

6.0 RECEIVING WASTEWATER TREATMENT FACILITY

NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
Atherton Wastewater Treatment Plant	816-796-7660	JColes@LBVSD.org
MISSOURI STATE OPERATING PERMIT #	COUNTY	REMAINING CAPACITY (GPD)
MO-0101087	Jackson	10

6.1 If different from the owner, has a letter been provided from the receiving treatment facility demonstrating that they agree to accept the expanded flow **or** has a properly executed Continuing Authority and Receiving Wastewater Treatment Facility Acceptance MO 780-2584 form been provided? ☐ YES ☐ NO ☑ N/A

6.2 A letter from the receiving wastewater treatment facility, if different than the continuing authority, is included with this application. ☐ YES ☐ NO ☑ N/A

6.3 If the receiving treatment plant or continuing authority is regulated by the Public Service Commission (PSC) for sewer activities, a Certificate of Convenience and Necessity has been received? ☐ Yes – Date: ☐ No ☑ N/A

OPTIONAL QUESTIONS REGARDING MILITARY SERVICE

Have you or an immediate family member ever served in the U.S. Armed Forces?	☑ Yes	☐ No
If yes, would you like information about military-related services in Missouri?	☐ Yes	☑ No

7.0 Application Fee

☐ Check Number ☑ JetPay Confirmation Number 20040139

8.0 PROJECT OWNER: I certify under penalty of law this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PROJECT OWNER SIGNATURE

PRINTED NAME	DATE
Craig Kohler, P.E.	January 17, 2023

TITLE OR CORPORATE POSITION	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
Senior Staff Engineer	816-969-1800	Craig.Kohler@cityofls.net

Mail completed copy to:	Submit completed electronic copy to:
MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM PO BOX 176 JEFFERSON CITY, MO 65102-0176	Missouri Department of Natural Resources at **DNR.WPPEngineerSection@dnr.mo.gov**

MO 780-1632 (10-22)

9.0 SEWER EXTENSION CHECKLIST				
SEWER EXTENSION DESIGN CERTIFICATION: Answer all questions yes or N/A. Answer N/A only if the question is clearly not applicable to the design of the proposed sewer extension.				
	REGULATION		YES	N/A
1.	8.110(3)(A)	Is the design flow based on actual flow data for an existing system?	☑	☐
2.	8.110(3)(B)	Are average design flows, peak hourly flows and I&I contributions for new systems calculated?	☐	☑
3.	8.110(9)(B)	Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?	☐	☑
4.	8.120(2)	Does the sewer exclude water from roofs, streets, groundwater from foundation drains and combined wastewater?	☑	☐
5.	8.120(3)(A)	Is the pipe installation, embedment and backfill designed to prevent damage to the pipe and its joints?	☑	☐
6.	8.120(3) (A)1	Is all sewer pipe constructed with a slope to obtain mean velocities of not less than 2 feet per second?	☑	☐
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?	☑	☐
8.	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	☑	☐
9.	8.120(4)(A)	Are manholes located at the end of each line, at all changes in grade, size or alignment and at all intersections?	☑	☐
10.	8.120(4)(C)	Are manholes at least 42 inches in diameter with a clear opening of 22 inches on sewer line larger than 8"?	☑	☐
11.	8.120(4)(C)	Where cleanouts are used at the end of a lateral instead of a manhole, they are a minimum diameter of 8 inches or larger and equal to the diameter for pipes < 8"?	☐	☑
12.	8.120(4)(E)	Are the manholes watertight, constructed and installed in accordance with the manufacturer's recommendations and procedures?	☑	☐
13.	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	☑	☐
14.	8.120(5)(A)	Is the sewer free from physical connections to a potable water supply system and no water pipes come in contact with a sewer manhole?	☑	☐
15.	8.120(5)(B)	Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures?	☑	☐
10.0 PRESSURE SEWERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST				
	REGULATION		YES	N/A
16.	8.125(5)(A)1.	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day?	☐	☑
17.	8.125(5)(A)2.	Is the diameter of the pressure sewer main pipe at least 1.5"?	☐	☑
18.	8.125(5)(B)	Are appurtenances compatible with the piping system?	☐	☑
19.	8.125(5)(B)2.	Are isolation valves located: upstream of major pipe intersections; both sides of stream, bridge and RR crossings; at terminal end of system?	☐	☑
20.	8.125(5)(C)	Do service line pipes have a minimum diameter of 1.25"?	☐	☑
21.	8.125(5)(D)1.A.	Do simplex grinder pump stations service only a single equivalent dwelling unit (EDU)? i.e. 1 residence – 1 grinder pumpt.	☐	☑
22.	8.125(5)(D)1.B.	Are multiple unit pump stations owned, operated and maintained by an approved continuing authority?	☐	☑
23.	8.125(5)(D)3.	Is there at least 70 gallons of storage in the grinder pump unit?	☐	☑
24.	8.125(5)(D)4.	Do grinder pump stations have shutoff valves, check valves and anti-siphon valves (where siphoning could occur) that are accessible from the ground surface?	☐	☑
25.	8.125(5)(D)7., 8.130(3)(B)2.	Are units serviceable and replaceable under wet conditions without electrical hazard and is electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location)?	☐	☑
26.	8.125(5)(D)8., 8.125(2)(F)6.	Are provisions in place to avoid interruption of service due to mechanical or power failure by providing standby power, storage capacity, or interconnection with another disposal system?	☐	☑
27.	8.125(6)(D)	In a STEP system is at least one septic tank (1,000 gallons or more) provided for each EDU with 20% of tank volume dedicatied to freeboard and ventillation?	☐	☑
28.	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or greater?	☐	☑

11.0 PUMP STATION CHECKLIST				
	REGULATION		YES	N/A
29.	8.125(7)(C)	Is the minimum diameter sewer main pipe and service line of STEG sewer at least 4"?	☐	☑
30.	8.130(2)(A) 8.140(2)(B)	Is the pump station designed to withstand the 100-year flood?	☐	☑
31.	8.130(3)(A)	Is the dry well completely separate from the wet well and is a suitable and safe means of access provided to each?	☐	☑
32.	8.130(3)(B)	If the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors provided?	☐	☑
33	8.130(3)(D)	Are valves located outside wet well unless integral to a pump or its housing?	☐	☑
34.	8.130(3)(F) 8.140(8)(J)	Do wet and dry wells have separate ventilation systems?	☐	☑
35.	8.130(3)(G)	Does all potable water brought to pump stations comply with 8.140(7)(D)?	☐	☑
36.	8.130(6)	Is an alarm system provided with uninterrupted power?	☐	☑
37.	8.130(7)(A)	Is there 2 hours retention of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs retention of the peak hourly flow for a design flow < 100,000 gpd?	☐	☑
38.	8.130(7)(B)	Are there independent utility substations provided for emergency power capable of starting and operating the pump station at its rated capacity?	☐	☑
39.	8.130(8)(A)	Is the force main velocity of ≥ 2 ft/s maintained?	☐	☑
40.	8.130	Are there complete operation instructions for the pumping stations provided that include emergency procedures, maintenance schedules, special tools and spare parts that may be necessary?	☐	☑

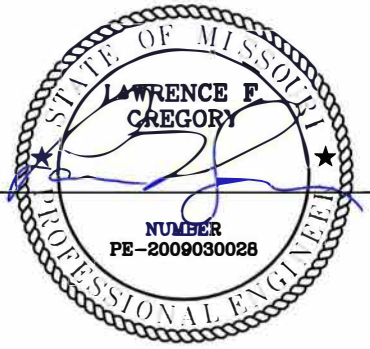
12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST				
	REGULATION		YES	N/A
41.	8.130(4)	Are the suction lift pumps of the self priming or vacuum priming type?	☐	☑
42.	8.130(4)(A)	Is the combined total of dynamic suction lift at the "pump off" elevation and required net positive suction head at design operating conditions less than or equal to 22 feet?	☐	☑
43.	8.130(4)(B)	Are there dual vacuum pumps capable of removing air from the suction lift pump?	☐	☑
44.	8.130(5)(A)	Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well?	☐	☑

13.0 SEWER EXTENSION CHECKLIST -- CERTIFICATION STATEMENT

For any questions answered "N/A" provide an explanation. Also provide any useful general comments regarding design for review engineer.

2-3 - There is no additional flow with this project. We are only relocating existing lines.
11 - Cleanouts are not used instead of manholes at any location.
16-44 - No changes are being made to the pump station. The inside diameter of the new HDPE is less than that of the class 50 ductile iron, which will increase the flow velocity. However, since the ductile iron is 30 years old and partially corroded, its Hazen-Williams coefficient is significantly lower than that of the new HDPE, resulting in minimal increase in headloss.

Missouri Professional Engineer's seal, signature and date:



Digitally Signed 01/17/2023

Name: Lawrence F. Gregory, P.E.

Address: Garver, 4300 South J.B. Hunt Drive, Suite 240

City: Rogers | State: AR | ZIP Code: 72758

Telephone Number with Area Code: 479-287-4677 | Email:LFGregory@GarverUSA.com